TUMORS.

I. On Tumors of the Bursæ. By Prof. H. R. RANKE (Groningen). Although the pathology and anatomy of the bursæ have been developed in several directions and by a goodly number of recognized authorities, yet our knowledge of tumors of this structure is still very deficient. Many cases of so-called tumors are known, but if we exclude all pseudo forms, neoplasms in the strictly scientific sense are rare. Perhaps not more than half a dozen cases are known. Most of the so-called tumors were the result of chronic inflammation (indurating, fibrinous, hæmorrhagic), of alteration in the contents of old hygromata (as, *e. g.*, calcification) or had arisen from operative cicatrices. Only in the International Cyclopedia of Surgery (Nancrede's article) does he find true bursal tumors fully separated. Only two such are there given, a third questionable one R. shows to have been of another nature. A third tumor (from the olecranon bursa) since observed by Nancrede is known to R. only by letter. Two new cases form the basis of his article.

(1) Myxoma of left prepatellar region, originating in a hygroma. The patient, a farmer æt. 63 years, was admitted with a large partially ulcerating tumor in front of the left knee. It secreted a considerable quantity of stinking serous fluid. A firm, round painless enlargement had been first noticed two years before. Repeated contusions were given as the cause. Nine months later this was nearly cured by compression but soon relapsed and would not again yield to such methods. Aspiration gave but temporary benefit. Patient then broke it, bloody stinking pus coming away. After this the growth increased more rapidly. Several pus-secreting openings formed and hæmorrhages occurred, finally followed by loss of flesh, evening fever and an obstinate dysenteric trouble. The use of the leg was, however, not greatly interfered with. The tumor was 20 ctm. long, 18 ctm. broad and 62 ctm. in largest circumference. It was easily displaceable laterally, less so vertically. The skin was adherent, coursed by large veins and perforated by fungus-like granulations bleeding freely on the slighest provocation. Patient consented to extirpation not amputation. It was separated from tendon of common extensor, periosteum of patella, and ligamen-

tum patellæ with comparative ease and without opening the knee. Some sixty vessels had to be ligated and a large skin-defect remained. The fever soon abated and temporary improvement followed. Death from pneumonia in two weeks. No metastasis. The growth probably originated from hygroma of the middle bursa.

(2) Hæmorrhagic sarcoma of right extensor bursa, first diagnosticated as chronic hæmorrhagic inflammation. Incision; scraping; drainage; temporary cure. Relapse resp. transformation of the inflammatory neoplasm into a tumor. Extirpation. Cure.

Healthy man, æt. 20 years. For a year a slightly painful enlargement of unknown origin above the left patella. Local applications did not seem to affect it. Presently increased growth. On incision the examining finger passed into a cavity beneath the end of the quadriceps, surrounded by soft parts, and apparently filled with a mixture of fluid and coagulated blood and muco-synovia like solution. From its walls projected soft masses like fungoid granulations and giving rise to free venous hæmorrhage. The cavity was scraped and washed out. Drainage. Permanent dressing. On removing the drain fourteen days later only a small doughy swelling remained. After two weeks under a protective dressing this had rather increased. A knee-compress seemed to stop further enlargement for three months. Then it rapidly grew to a larger size than before. The knee could scarcely be flexed to a right angle. The cicatrix at former opening was transformed into a bluish red soft prominence on pressure evidently disgorging its fluid contents into the chief tumor. This time the tumor with capsule and cicatrix was prepared out. The periosteum of the femur and the joint-cavity remained intact. No bursa was now to be found between bone and muscle, hence the bursa under the common extensor must have been the seat of the trouble. Fortunately no union with the joint existed. The patient has remained healthy; flexion is not greatly impaired.

As a third case he relates that of a simple angioma originating in the cicatrix of an old obliterated præpatellar hygroma. Extirpation. Cure.

Short abstracts of four other published cases and one communicated to him by Mikulicz are added, making with his two a total of seven.

These cases represent two classes; one where the bursal wall is transformed into some structure allied to connective tissues as chondroma, sarcoma, myxoma, etc.; the other, epithelial neoplasms, as yet only observed where fistula was present.

It is doubtful if a normal bursa is ever the starting point of these new growths.—*Arch. f. klin. Chirg.*, 1886, Bd. 33, Hft., ii.

W. BROWNING (Brooklyn).

II. On Subdiaphragmatic Cydatids and their Treatment.

By Dr. LEOPOLD LANDAU (Berlin). Hydatid cysts springing from the upper surface of the liver naturally press upwards into the thorax, displacing the heart and lungs. The diaphragm offers less resistance than the anterior abdominal walls. From time to time cases have been recorded which caused pleurisy, atelectasis pulmonum, empyema and pyopneumothorax and various operative measures, such as blind tapping and resection of the ribs have been undertaken with small amount of success. Dr. Landau's method of obtaining access to deeply seated cysts between the liver and diaphragm is shortly as follows: Having determined by repeated punctures that the cyst lay on the convex surface of the liver an incision was made in the *liniæ alba* from three fingers' breadth above the umbilicus to the ensiform cartilage. As the liver surface which presented was of the natural colour the finger was passed upwards and the organ drawn down and anteverted. Two sutures having been passed through liver substance, peritoneum and abdominal walls at the angles of the wound were given to an assistant to hold. Dieulafoy's needle being again used the cyst was found to tend chiefly to the upper surface of the left lobe, so a small incision was made through the liver substance upwards and to the left. The result was that a large quantity of cysts were forcibly ejected from the upper angle of the wound. The bent forefinger was then insinuated into the sac clearing out a number of daughter cysts. The upper wall of the cyst was found to be firmly united with the diaphragm, the cardiac impulse beingly plainly felt. The edges of the incised liver were then united with those of the abdominal walls, and the cavity washed out with sublimate solution (1 in 5,000), and three large drainage tubes inserted. The sutures were removed on the